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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

December 22, 2004

Mr. Roy J. Schepens
Office of River Protection
United States Department of Energy
P.O. Box 450, MSIN H6-60
Richland, Washington 99352

Dear Mr. Schepens:

Re: Washington State Department of Ecology (Ecology) review of the Double Shell Tank (DST) Permit Application, Rev. 0b, Notice of Deficiency (NOD) Response Table Submitted to Ecology on June 9, 2004

Ecology has reviewed a portion of the Response Table (as referenced in Hanford Federal Facility Agreement and Consent Order Figure 9-2, Box 4) for the DST Permit Application Rev. 0b. Enclosed are Ecology's NOD responses on chapters 1 and 2. Ecology will stage submittals of the remaining chapter responses per a discussion with your tank farm contractor.

Please contact Ecology to set up meeting times and location for the NOD workshops for the attached chapters. If you have any questions regarding this letter, please contact, me at 372-7912 or Jeff Lyon at 372-7914.

Sincerely,

Brenda K. Jentzen
Permit Lead, Double Shell Tank System
Nuclear Waste Program

cc: Jim Rasmussen, USDOE
Edward Aromi, CH2M
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Administrative Record: DST; Tank Waste Storage
CH2M Correspondence Control
Environmental Portal

WASHINGTON STATE DEPARTMENT OF ECOLOGY
DOUBLE-SHELL TANK PERMIT APPLICATION NOTICES OF DEFICIENCY
RESPONSE TABLE
12/22/04

No.	Position in Document	Comments/Response Chapter 1 – Part A	Regulatory Citation
1.	Chapter 1 General	Part A, Form III, 204-AR Waste Unloading Station, Cutaway View: Check piping exiting the facility labeled as UQW-702. Should this line be LOQW-702? Response: accept, UQW-702 will be changed to LIQW-702 Ecology Response: Accept, upon approval of revised text.	
2.	III. B Part A form 3, DST Page 2	Account for the difference between what was indicated on Rev. 10 and Rev.11 in Process Design Capacity amounts. Response: As noted in Section III.C, Rev. 11 is not to take effect until the date of permit issuance. Rev. 10 will be the official DST Part A until all of the DST System isolation and upgrade activities are complete. The main difference in estimated process design capacities between Rev. 10 and 11 is that Rev. 10 accounts for the DCRTs and the EW vent station, neither of which will be in service at the time the permit is issued. Rev. 11 reflects those systems/components for which DOE is seeking a operational Part B permit Ecology Response: The statement above that the Rev.10 will be the official Part A until all the DST system isolation and upgrade activities are complete may not be accurate. The M48-07 allows one year for the equipment coming out of service to be stabilized and isolated. The M48-07 also requires the equipment be monitored. Place a statement in the Part A stating that the Part B application provides the detailed description of the DST system and lists the out-of-service equipment. The Rev. 11 Part A will need to be updated to the new (To be adopted Jan. 1, 2005) Part A form prior to Ecology approval. The Rev. 11 Part A will be approved when the final DST permit is issued provide all the information in the Part A is accurate at that time.	
3.	III. C Part A form 3, DST Page 2, 2nd paragraph	Explain change in operational dates. Response: accept, typo, page 3 of 22 operational dates for 241-AZ-101and -102 will be changed from 1/76 to 11/76. Ecology Response: Partial acceptance. Rewrite 1st sentence, 2nd paragraph to say, "The Double-Shell Tanks (DST) System began operations in 1955.	

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No.	Position in Document	Comments/Response Chapter 1 – Part A	Regulatory Citation
4.	III C. Part A form 3, DST Page 2, 2nd paragraph	Explain why the reference to waste received from tank truck transfers was removed Response: accept, typo, "truck transfers" will be added back in. Ecology Response: Accept, upon approval of revised text.	
5.	III C. Part A form 3, DST Page 2, 3rd paragraph	Delete sentence after '242A Evaporator' and insert the sentence: The high-level mixed waste is accumulated in the DST System until the waste is transferred for treatment to the Hanford Waste Treatment Plant. The wording in the DST Part A on the description of waste must be consistent with the Tank Waste Remediation System, Final Environmental Impact Statement. Response: reject, "the terms high-level and low-level"are DOE waste classifications. WAC-173-303-040 defines mixed waste as the following: "Mixed waste" means a dangerous, extremely hazardous, or acutely hazardous waste that contains both a non-radioactive hazardous component and, as defined by 10 Code of Federal Regulations(CFR) 20.1003, source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) The WAC defines mixed waste irrespective of curie content or nuclear waste classification and therefore is the proper terminology for the DST application. Ecology Response: Accept.	
6.	III. C Part A form 3, DST Page 2, last paragraph	Account for differences in volumes. Response: Volumes reflect the post 2005 system; see responses for comments 1-2 and 1-3 above. Ecology Response: The Part A Rev.11 can reflect the proposed post 2005 system. However, an official Rev. 11 using the new Part A form must be submitted for Ecology approval. See Ecology response to NOD # 2.	

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No.	Position in Document	Comments/Response Chapter 1 – Part A	Regulatory Citation
7.	Part A form 3, DST Page 2, Tanks Table	Reinsert deleted photos, maps, and tanks: 241-EW-151, 244-BX, 244-TX, 244-U, 244-A You many indicate tanks to be taken out of service, close them by following WAC 173-303-830, -610, 640. The Part A form remains the same until you disposition the tanks. Response: reject these tanks will not be part of the Post 2005 DST system and therefore will not require permitting. Rev. 10 of the Part form 3 includes these components and will stay in effect until the final permit is issued. Components that do not make up the post 2005 system will either have to added to the SST part A or added to Rev. 11 of the DST part A. Ecology Response: See response on NOD #2. All equipment that is going out of service by June 2005 must be listed in appendices of the Part B (as equipment to be isolated, stabilized, and monitored in accordance with M48-12 compliance schedule). This will ensure that the equipment is tracked by the permitting process.	
8.	Part A form 3, DST Page 2, Tank Table	Correct spelling of "aging' and define aging and non-aging waste. Response: partial accept, spelling will be corrected. Aging and Non-aging waste are defined in end notes at the bottom of each tank table. Ecology Response: Accept, upon approval of revised text.	

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No.	Position in Document	Comments/Response Chapter 1 – Part A	Regulatory Citation
9.	Part A form 3, DST Page 6	• Explain deletion of the 340 Complex and replacement with "tank farm" Response; accept, the 340 complex was deleted because it is no longer used as a < 90 storage facility and has been designated as a Comprehensive Environmental Response Compensation Liability Act (CERLA) past practice site. No part A form 3 exists for this facility. Previously the only mode for transferring waste from the 340 complex to DSTs is tanker truck or rail car. This activity no longer occurs. Tank farm complex was added to identify SST waste. Ecology Response: Reject; the 340 complex is still in the WAP in the Part B permit, page 25. DST may still receive the leachate form the 307 basins which are part of the 340 complex and if so, should not be deleted. • Reinsert "Leachate resulting from Hanford Facility land disposal surface impoundment operations." Response: partial accept; will reinsert "leachate resulting from Hanford Land disposal. Ecology Response: Reject, Request text "Leachate resulting from Hanford Facility land disposal and surface impoundment operations." • Reinsert "Multi source leachate (F039) is included as waste derived from nonspecific source wastes F001 and F005." Response, reject; F039 is already listed in the section IV of the DST Part A Rev. 11 and is associated with leachate resulting from Hanford land disposal. Ecology Response: Accept.	
10.	General	If your process design capacity is going to decrease, would your estimated annual quantity of waste decrease also? If yes, then change estimated annual quantity of waste to reflect this Response: partial accept, equipment taken out of service [i.e., Double Contained Receiver Tanks DCRT) Catch Tanks, etc.] will cause some decrease in design capacity post 2005. However the estimated annual quantity of waste managed may stay the same or go up. This would be due to waste being moved through the DST system and on to the WTP for treatment. Ecology Response: Accept.	

No.	Position in Document	Comments/Response Chapter 1 – Part A	Regulatory Citation
11.	VII	Latitude and longitude needs to be filled out even though you state the information is available on attached photos, etc. Response: accept Ecology Response: Accept, upon approval of revised text.	
12.	IV. Section D.2. (Process Description)	Indicate "includes hazardous debris" for all waste streams. Response: accept Ecology Response: Accept, upon approval of revised text.	
13.	General	Need attachment listing which lists the other Environmental Permits. Response: Section 2.1.7 specifies DOE/RL 96-63 the *Annual Hanford Site Environmental Permitting Status Report* (DOE/RL-96-63). DOE/RL-96-63 includes all applicable permits required to operate the DST system. Ecology Response: Reject. WAC 173-303-803(3)(k) requires a list. As of January 1, 2005, the new Part A form requires a specific list for the unit.	WAC 173-303-803(3)(k)
14.	204 AR Waste Unloading Station, Part A form 3	Insert: Multi-source leachate (F039) is included as a waste derived from non-specific source wastes F001 and F005. Response: reject, page 4 of 12 line #36 lists F039. By definition F039 is a multi-source leachate including waste derived from non-specific source wastes F001 and F005. Ecology Response: Accept.	

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No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
1.	Chapter 2 General	Provide a Table that shows the DST Tank System with the following headings: Tank Farm, Component Id #, General Description, Date of Construction, Description of Tanks System Equipment, Projected Final Disposition for Closure, Type of Environmental Monitoring, Operational Status (Active/Closed). Response: reject, the information being requested is already provided within the application. The size of the DST system prohibits tabularizing this information within a single table Information regarding the tank farm, component ID# are currently found in appendix 4C (Volume 2), "Pre/Post 2005 component list. General description of components is found in Chapter 2. Dates of construction: AY 1968-70; AZ 1971-77; SY1974-76; AW 1978-80; AN 1980-81; AP 1983-86. This information is provided in Chapter 4. Type of environmental monitoring is discussed in Chapter 4 and Appendix 6A. Operational status and projected final disposition for Closure for those components not to be used past 2005 is provided in Appendix 11B. Ecology Response: Reject. The information provided in Appendix 4C is not organized in a manner that can be followed to understand the DST system. The information provided to Ecology must be clear, concise, and accurate, to assist the public in understanding what encompasses the Part B permit.	WAC 173-303-806(4)(a)(i)

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No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
2.	Page 2-1, Paragraph 2	Revise the application to reflect the full scope of the activities to be conducted in the DSTs. The U.S. Department of Energy is requesting a permit to operate the post 2005 DST waste transfer system and that limited information will be provided about the pre-2005 system. Ecology notes that mention is not made of treatment and storage of tank waste in the tanks. The permit must address treatment and storage in the DSTs, as well as transfer of waste to the Waste Treatment Plant. Response: accept, will add the following text: "This purpose of this Part B permit application is to obtain a final status Part B permit for operating the post 2005 DST system for waste storage, and treatment" Ecology Response: Accept, upon approval of revised text.	WAC 173-303-806(4)(a)(i)
3.	Page 2-1, Paragraph 2	Remove the following statement from the application, "Limited information on the Pre 2005 system is being provided for completeness sake and to identify systems for closure." No options are provided in the Dangerous Waste Regulations for incomplete descriptions of the facility because the permittee wishes to close parts of it while other parts continue operation. Response, reject; WAC-173-303-806 requires description of the systems that the applicant is requesting the permit for. Based on provisions under Tri-Party Agreement pre 2005 systems will not require a final RCRA Part B permit and, therefore, these systems are being identified for closure purposes only. Ecology response: Pre-2005 DST system may not be permitted for the Part B; however, a complete description is required for final status closure. The entire DST system has a Part A and must either be Final Status permitted or go to closure. Rewrite as "Information on the Pre-2005 DST system is being provided for completeness and closure." These components will are required to comply with WAC 173-303-640(8).	WAC 173-303-806(4)(a)(xxiii)

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No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
4.	Page 2-1, Paragraph 6	Provide a detailed description of the 204 AR Waste Unloading Facility. The 204-AR Waste Unloading Facility is connected to the Tank Farms via an underground transfer line. That description is not complete because while underground lines from the 204-AR route waste to the Tank Farms, an underground line comes into the 204-AR to bring waste. In addition, the capability exists in the facility to remove waste from tanker trucks then treat the waste (raise the pH) and route it to the Tank Farms. Response: Sections 2.1.3 and 4.2 provide detailed descriptions of 204-AR. The only underground line between 204-AR and the DST system is line # LIQW 702 -A. This line transfers waste out of 204 AR only. Waste transfers into 204 AR are done via truck or rail car. More information can be added about LIQW 702 A if necessary. Ecology Response: Accept, upon approval of revised text and inclusion of the added information about LIQW 702A.	WAC 173-303-310 and WAC 173-303-395(6)
5.	Page 2-1, Paragraph 5	Expand the description of the DST tank farms to include ancillary equipment. Paragraph 5 describes the 6 DST tank farms as comprised of a certain number of tanks, connected by piping. This general description is not complete, because it does not include a reference to other ancillary equipment (e.g., in tank farm piping, receiver tanks, transfer valve pits). Response: reject, Section 2.1.2.2 -2.1.2.6 provides description of ancillary equipment. Additional detail can be found in Chapter 4.0. Ecology Response: The description of the DST system should be provided in Chapter 2. However, Ecology will accept the description placed in Chapter 4, provided that references are made in Chapter 2 to the location of the detailed descriptions in Chapter 4 and the detailed description in Chapter 4 is acceptable to Ecology.	WAC 173-303-806(4)(a)(i)

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
6.	Page 2-1, Paragraph 7	Remove the Atomic Energy Act (AEA) assertion from this chapter. Listing the U.S. Department of Energy's assertion with regard to the AEA in Chapter 13 is sufficient to allow Ecology permit writers to review the applicability. As stated elsewhere in these comments, the discussion of applicability of other State and Federal regulations is required to be included in the permit; however, this section is not appropriate. See comments on Chapter 13. Response: reject, the AEA exclusion provided with the application is appropriate based on ORP/CHG legal review. Ecology response: Reject. The following text will be used in the DST permit to cover the AEA exclusion: "Where information regarding treatment, management, and disposal of the radioactive source, byproduct material and/or special nuclear components of mixed waste (as defined by the Atomic Energy Act of 1954, as amended) has been incorporated, it is not incorporated for the purpose of regulating the radiation hazards of such components under the authority of this Tank Waste Retrieval Work Plan or chapter 70.105 RCW."	WAC 173-303-806(4)(xix)
7.	Page 2-1 Section 2.1.1 Paragraph 5	Provide Ecology information from the tank closure EIS showing any significant impacts to the environment and public health resulting from the closure of the DST components to be closed with the SSTs. Section 2.1.1, paragraph 5 asserts that certain DST components will be included in the SST Closure Plan and closed with the SSTs. Response: Impacts identified concerning closure of some DST components within the SST waste management areas are addressed in the draft Tank Closure Environmental Statement (TCEIS). Any DST closure EIS information provided at this time would be for information only. Ecology Response: Reject. Identify the interfaces between the DST and SST system; if already identified, reference it in this section. Describe DOE's strategy to mitigate potential DST impacts as a result of SST closure activities.	WAC 197-11-055(2)(c)
8.	Page 2-1 Line 36	Some discussion of area designation and interface with the site-wide permit needs to be made here. That is, define "600 Area" and "200 Area." Response: accept; will add definitions for 200 Area and 600 Area Ecology response: Accept; provide text for clarity and enforceability.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
9.	Page 2.2 Section 2.1.1 Line 11-17	This paragraph is in quotes and is apparently a reference from some other source. Please specify this document. Response: accept, will revise the lead in sentence to the following: this paragraph was taken directly from the response to administrative orders 1250/1251 (DEC 2000). Ecology Response: Accept, upon approval of revised text.	
10.	Page 2-2 Section 2.1.1 line 32 - 35	Rewrite this paragraph as follows: These lists (1A and 5) and sketches (B227) define the DST TSD waste transfer unit boundary for operations of the current DST system, Pre-2005 DST system and the Post-2005 system. The list in appendix 11B identifies which of the Pre-2005 components will be closed with the SST closure plan or DST closure plan. Response: partial accept, will revise as indicated above along with the following wording; "Please note that B227 sketches will be renamed after the E-525 project is completed. The B227 sketches and list 5 will be revised periodically to reflect current DST system configuration." Ecology Response: Due to the lack of SEPA coverage for DST closure, Appendix 11B should be moved to a Chapter 4 appendix. Change the text above to reflect the change in the appendix number.	
11.	Page 2-2 Paragraph 6	Describe cathodic protection systems in Chapter 2 and show on drawings. Ecology considers cathodic protection and ventilation as critical systems. Paragraph 6 states that cathodic protection systems and ventilation systems are not shown on drawings because they are supporting systems. The same paragraph contains an assertion that all DST systems are fully described in the permit application. Cathodic protection systems can be considered as part of the equipment used to provide external corrosion protection of tank systems; therefore, they must be described in the Part B application and shown on drawings. Response: reject, the particular drawings referenced are for depicting the transfer piping system only. Cathodic protection systems drawings are listed in Appendix 4 D. Access to the H-2 drawings listed will be provided upon request. Both the ventilation systems and cathodic protection systems are fully described in Chapter 4. Ecology Response: Since Chapter 2 is the description of the system add a reference to Appendix 4D. This section must clearly describe all DST systems, especially ventilation. The cathodic protection system must be evaluated in the integrity assessment. An inspection schedule must be provided for cathodic protection.	WAC 173-303-806(4)(c)(v)

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
12.	Page 2-3 Line 1 - 16	This section does not talk about or list all of the ancillary equipment used in the tank farms such clean-out-boxes, catch tanks, double-contained receiver tanks, inactive miscellaneous underground storage tank (IMUST), hose-in-hose transfer lines (HIHTLs), and the long-length equipment. It is difficult to ever have a list that is all inclusive therefore a statement needs to be made that the list includes, but is not limited to, the following items. Response: accept will add language as suggested above. Please note that the purpose of this application is to permit only the system required to provide waste feed to WTP. DCRTs, IMUSTs and all but one catch tank (241-AZ-301) will not be part of the post-2005 system. HIHTLs are described as part of the DST system transfer lines chapter 4.0. A brief description for HIHTL will be provided in Chapter 2.0. Ecology Response: Chapter 2 is for facility description and should provide DST system description. Chapter 4 is for the process and should state how the system operates. If the description of DST components is in Chapter 4 then reference the information in Chapter 2.	
13.	Page 2-3 Line 19	Replace figure 2-1 with a more detailed drawing. Please show the differences in the double shell tank. As built drawing would be the best. Response: accept a more detailed drawing will be provided. Ecology Response: Accept; provide the drawings for Ecology approval.	
14.	Page 2-4 Section 2.1.2.2 Paragraph 5	Identify the location of transfer pipelines that carry waste from the DSTs to treatment and storage units in the 200E and 200W. Ecology is aware of construction efforts to route lines from the DSTs to the Waste Treatment Plant in the 200 East Area, but unaware of lines that transport waste from the DSTs to such units in the West Area. Response: accept will revise text to exclude reference to treatment systems in the 200 West Area. Ecology Response: Accept, upon approval of revised text.	WAC 173-303-806(4)(c)(iv)

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
15.	Page 2-5 Line 1-7	Explain the description of stainless steel pipe(s) in concrete encasement. Concrete encasements are non-compliant lines. The line must be double contained. Are these lines in service? If Ecology has reviewed these concrete encased lines and chose to use enforcement discretion provide a reference to the official transmittal. Response: accept, only compliant lines will be used past 2005, unless a variance is obtained from Ecology. Wording explaining concrete encasements shall be removed. A summary of the variance from secondary containment granted for SY lines will be added to this section with reference to Section 4.1.7. Ecology Response: Accept; assure Ecology that all pre-2005 lines will be isolated, stabilized, and monitored.	
16.	Page 2-5 Paragraph 4	Correct the statement in Paragraph 4 to state that 241-AZ-151 will not be addressed by June 2005 and inform Ecology of any other catch tanks that will not be removed from service by June 2005. Paragraph 4, catch tanks states that all catch tanks are non-compliant and will be removed from service by June 2005. Section 4.3.6 is referenced; however, the text in that section discusses the Project E-525 scope, catch tank/bypass, which identifies two inputs to the 241-AZ-151 that will remain in service after June 2005 and need to be addressed. Response: 241-AZ-151 will be removed from service and isolated by June 2005. A new replacement tank will be installed. Any inputs associated with 241-AZ-151 will be addressed by the new tank. No correction needed in paragraph 4. Section 4.3.6 will be revised to detail this activity. Ecology Response: Provide the additional text for clarity and enforceability.	
17.	Page 2-5 Line 12	Provide the following information. Where are the swab risers located and in what lines? How often are they sampled? Response: reject, swab risers are not considered a primary form of leak detection and very few lines (less than 10%) are equipped with swab risers. Line 12 will be deleted. Ecology Response: Accept. Removal of the information on swab risers will mean that no credit can be taken for using them to confirm or deny leaks.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
18.	Page 2-5 Line 16-17	Where is the discussion (as stated on line 17) in chap. 4 section 4.1.2.1.3.1.1 which has the detail on the valve pits? This section does not exist. Correct with the appropriate section. Response: accept, will make reference to the correct section (4.1.3.2.1.1.2). Ecology Response: Accept.	
19.	Page 2-5 Line 35	Section 4.1.1.6.5 that is referenced does not exist. Correct with the appropriate section. Response: accept, will make reference to the correct section (4.1.3.2.1.1). Ecology Response: Accept.	
20.	Page 2-6 Section 2.1.2.2	Include in this section mixer pumps and mixing. Mixer pumps are used to control the release of trapped gas and to mobilize solids, both are forms of treatment. Both must be performed to meet WAC 173-303-395 requirements. Response: accept will include section on mixer pumps and mixing Ecology Response: Accept; provide text for clarity and enforceability.	WAC 173-303-395
21.	Page 2-6 Section 2.1.2.2	Include in this section the control system (pump interlocks, system response time, etc.). Response: accept, the following will be added as a sub paragraph to this section: "Pump control and interlock circuitry (master pump shutdown system) and devices are provided to prevent contamination of the environment and equipment if a leak occurs during waste transfer operations. See Chapter 4.0 for detail" Ecology Response: Provide the new text and also reference the section in Chapter 4 where the information is provided.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
22.	Page 2-6 Section 2.1.2.2 Paragraph 5	Chap 2, pg 2-6, Para 5, Section 2.1.2.2: Verify if steam coils were used to prevent steam "bumps" due to the addition of boiling waste to cooler tank liquid. Describe what bumping was and its effect on tanks. Response reject; steam coils are no longer used, "bumping" is no longer an issue. Therefore any discussion regarding steam coils and/ or the "bumping" phenomena is irrelevant. This equipment was used for Atomic Energy Act purposes and will be abandoned in place. Ecology Response: Accept; recognize that steam coils are not longer being used.	
23.	Page 2-6	Inform Ecology of plans to use the circulators, as well as impacts to operation that arise from leaving them in the tanks during waste retrieval. No statement is made about the use of the air lift circulators in the future, plans to remove the circulators, or the impact of those circulators out of service on the use of the DSTs. Response: there are no known impacts to retrieval due to leaving the air lift circulators in place. As stated on lines 27-28, airlift circulators are used to mobilize waste for waste transfer operations. Regulations do not require notification to Ecology prior to or during use of this equipment. Ecology Response: Accept; assure that Chapter 4 addresses the additional load that the airlift circulators put on the tank ventilation systems.	
24.	Page 2-6	Provide information on the condition of steam coils and impact on DST waste transfers. Response: reject, information on steam coils is superfluous and will be removed. Ecology Response: Accept.	
25.	Page 2-6 Line 13	The section referenced for DST system pits is inaccurate. Section 4.1.3 is Post 2005 system. Correct with the appropriate sections. Response: accept, will make reference to the correct section (4.1.4). Ecology Response: Accept.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
26.	Page 2-6 Line 36-37	The statement that, "tank farm pipeline refers to pipeline used to distribute waste within an individual tank farm" does not appear to be accurate. Other lines are considered DST pipeline which are not located within a particular tank farm boundary (e.g. cross site transfer line). Rewrite this sentence to accurately reflect all pipelines that are within the DST system. Response: accept; discussion on tank farm pipelines will be consolidated. Additional information will be added briefly describing the cross site transfer system. Ecology Response: Accept; provide text for clarity and enforceability.	
27.	Page 2-6 Section 2.1.2.4 Line 49	Please elaborate on exactly how the ventilation system is used to meet WAC 173-303-395 requirements: e.g., removal and/ or dispersion of toxic gases, mists, particulates and flammable gas. Response: detail is provided in section 4.1.11.4. Ecology Response: The information detailed in 4.1.11.4 does state that the ventilation will meet WAC 173-303-395(b)(i). Add a sentence to state that the ventilation system is compliant with the WAC regulations and describe the knowledge basis for this assertion with the sampling and analysis results to confirm. If the DST ventilation system is not compliant then provide a compliance schedule showing the actions that DOE plans to bring the system into compliance.	WAC 173-303-395

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
28.	Page 2-7 Line 1	Justify the statement that, "the negative pressure in the tanks prevents the escape of untreated dangerous and/or radioactive gases to the atmosphere." Is the text in the application indicating that gases never escape from the Double Shell Tanks? Response: accept, the following text will be added to Section 2.1.2.4 "All DSTs are actively ventilated by exhausters which impart a negative pressure within the primary and secondary shells. Fugitive emissions (gases) are mitigated through continuous operation of the exhausters. Exhausters facilitate dispersion of fugitive gases that are emitted from the DSTs to the extent that off-site receptors are adequately protected. Workers and onsite personnel must use appropriate personal protective equipment (PPE) when in certain areas of the Tank Farms. Annual emission rates are verified through annual certification of the Air Operating Permit (AOP)." The active ventilation systems described in detail in chapter 4.0 of this application and the AOP. Ecology Response: Provide text for clarity and enforceability. The Air Operating Permit is required to ensure compliance with the Clean Air Act. However, describe how the ventilation system comply with WAC 173-303-283 (3)(i), -640(5)(e), -806(4)(c)(xii), -806(4)(a)(viii) E &F. Describe the design basis for the ventilation system to ensure a negative pressure is maintained in the tank, and the measures taken to ensure reliable operation.	
29.	Page 2-7 Line 8	Describe the filtration system and what the filtration system is capable of filtering. Response: accept, Chapter 4.0 describes the filtration system in detail. Text will be modified to reference 4.1.11.4 instead of 4.1.10.1. Ecology Response: Reject. Describe the filtration system logic, for example, the two (2) stage HEPA filter, etc.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
30.	Page 2-7 Section 2.1.3	Clarify the uses of the 204-AR as planned after FFY 2005. Section 2.1.3 states that the 204-AR Facility can accept waste from tanker trucks or rail cars. The facility as currently configured does not accept waste from rail cars, although it has in the past. It is unclear if this description is intended to notify Ecology that 204-AR will be receiving waste via rail cars after Federal Fiscal Year 2005. Response: reject, DOE is seeking a permit for the facility as described. Whether the facility actually receives waste via rail car will be determined at a later date. Ecology Response: The permit is to be true, accurate, and complete. Question still stands as to DOE's capability to receive waste by rail to 204-AR. If DOE is positioning for a separate permit for the 204-AR, this section must address the interfaces with the DST system.	
31.	Page 2-8	Describe the mechanism used to adjust the waste pH (injection during transfer to the DSTs). Provide this information in Chapter 4. Section 2.1.3 states that the pH of the tank waste is adjusted when waste is at a pH of 12 or less to meet the acceptance criteria of the DSTs. Response: reject, Corrosion and Erosion Prevention is described in Section 4.1.5.2. The mechanism for adjusting pH is described in the Appendix C (Chemistry Control for Waste Compatibility) to the Waste Analysis Plan (Appendix 3A of the Part B). Ecology Response: Correct the numbering in this section and clarify the referenced sections. It appears that the numbers stated are not sequenced appropriately. This section also references the DST system, not the 204-AR. The 204-AR is actually section 4.2.1.6.	
32.	Page 2-9 Line 10-11	Is this accurate? Are the DCRTs remaining in service past 2005? Response, accept: all DCRTs will be isolated and taken out of service prior to June 30 2005. Additional information will be added to chapter 4 to reflect this. Line 10-11 will be revised to reflect the post 2005 system only. Ecology Response: Provide text for clarity and enforceability. When will the post-2005 DST components be transferred to the SST closure plan? Provide a schedule for this action in the application.	

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
33.	Page 2-9 Line 10-11	The sentence states that we need to see Section 2.1.4 in Section 2.1.4. What are you trying to say? Response: accept, this sentence will be revised to reflect the post 2005 system only. Ecology Response: Accept; correct the text, as this section states that DCRTs will receive waste. Previously, it was stated that the DCRTs will be removed from service. Provide changes in text for clarity and enforceability.	
34.	Page 2-9 Line 18-19	What is the current specific gravity being sent to the DSTs? Where is this information in the permit application? Response: partial accept, typical specific gravity of waste sent to the DSTs is ≤ 1.47.This information is not required for permit application and therefore it has been intentionally left out of the Part B. Ecology Response: This information will need to be reflected in the integrity assessment.	
35.	Page 2-9 Line 21-23	This paragraph states the DST waste will be sent to another waste management unit for treatment. Isn't this the Waste Treatment Plant? Be specific and give detail. Replace "another waste treatment management unit" with "Waste Treatment Plant". Response: partial accept, will revise to state that "the DST waste will be sent to another permitted treatment storage and disposal (TSD) facility for treatment. Possible TSDs include the Waste Treatment Plant." Ecology Response: Provide text for clarity and enforceability.	
36.	Page 2-11 Section 2.1.6	Please add that the tank farms must prevent releases to the atmosphere in accordance with WAC 173-303-806(4)(a)(viii)(e & f) and -610 (5)(e) Response: accept, will add sentence identifying these regulations. Toxic air emissions are met through implementation of the non-rad Notice of Construction (NOC) generated pursuant to WAC-173-400, and -460. Ecology Response: Reject. The NOC does not assure that the releases to the atmosphere are in accordance with WAC 173-303-806(4)(a)(viii)(e & f) and -610 (5)(e).	WAC 173-303-806(4)(a)(viii)(e & f) WAC 173-303-640(5)(e)

WASHINGTON STATE DEPARTMENT OF ECOLOGY
DOUBLE-SHELL TANK PERMIT APPLICATION NOTICES OF DEFICIENCY
RESPONSE TABLE
12/22/04

No.	Position in Document	Comments/Response Chapter 2	Regulatory Citation
37.	Page 2-12 Section 2.1.7	Under other environmental permits: State which permits are required to support the DST in this section and provide the Environmental Permitting Status Report and all the updates in this document. Response: partial accept, Ecology already receives this document annually. The most current revision (Rev. 7) was submitted to Ecology. Ecology Response: Accept.	
38.	Page 2-12 Section 2.1.8	Add the sentence: The project schedules are provided on pages F2-3, F2-4, F2-5, and F2-6. The project schedules will be provided to Ecology as updates occur. Response: accept reference to pages F2-3, F2-4, and F2-6 will be added. Project schedules will be provided as changes occur. Ecology Response: Ecology would be amenable for DOE to provide status reports with an amended baseline schedule on an annual basis.	
39.	Page 2-12 Section 2.2	Revise paragraph to state that: As DST components are taken out-of-service, Ecology will be notified. A closure schedule for these components must be supplied in the closure plan. Response: reject, the DST application is in compliance with M-48-07 which states the following; "A description of the final disposition of each component upon removal from service (i..e., inclusion within a RCRA Closure Plan)." Appendix 11B of the DST closure plan has the listing of post 2005 components and description of final disposition. Ecology Response: Add to text: "A description of the final disposition for each component upon removal form service will be provided to Ecology on an annual basis." Also, provide a disposition schedule in the permit application.	